

WE CLAIM:

1. A data processing apparatus configured for operation in conjunction with an external computer selectively originating a ready control signal, the data processing apparatus comprising:

5 a host configured to receive the ready control signal and produce a control signal in response thereto;

a telecommunication device; and

a switch circuit which selectively couples one of the host and the external computer to the telecommunication device in response to the control signal from the host.

2. The data processing system of claim 1 wherein the host is configured to:

15 generate the control signal for coupling the external computer to the telecommunication device in response to receipt of the ready control signal; and

generate the control signal for coupling the host to the telecommunication device in response to absence of the ready control signal.

3. The data processing system of claim 1 wherein the switch circuit comprises:

a first switch to couple one of a data output of the external computer and an output of the host with an input of the telecommunication device; and

a second switch to couple one of an output of the host and an output of the telecommunication device with an input of the external computer.

4. The data processing system of claim 1 further comprising: a connector to detachably couple the external computer and the switch circuit.

5. The data processing system of claim 1 further comprising: a first host serial communication circuit to couple the host with the switch circuit and the external computer; and a second host serial communication circuit to couple the host with the switch circuit and the telecommunication device.

6. The data processing system of claim 1 wherein the telecommunication device comprises a radiotelephone.

7. The data processing system of claim 6 wherein the telecommunication device comprises a cellular telephone.

8. The data processing system of claim 6 wherein the telecommunication device comprises a satellite telephone.

5

9. An in-vehicle data system comprising:

a vehicle telecommunication device for two-way voice and data communication between the vehicle and a remote telecommunication device;

5 a connector configured to detachably couple with an external computer, the external computer selectively providing a ready control signal to the connector;

a host processor including:

10 a second communication port having an input coupled with the vehicle telecommunication device and an output, and

a first communication port having an input coupled with the connector and configured to receive the ready control signal and an output; and

15 a switch circuit responsive to a control signal from the host processor for coupling the connector to one of the output of the first communication port and the input of the second communication port and for coupling the vehicle telecommunication device to one of the output of the second communication port and the connector.

20

10. The in-vehicle data system of claim 9 wherein the first port comprises a first host serial communication circuit.

5 11. The in-vehicle data system of claim 10 wherein the second port comprises a second host serial communication circuit.

12. The in-vehicle data system of claim 11 wherein the first host serial communication circuit and the second host serial communication circuit communicate with the radio and the external computer according to a predetermined serial communication protocol.

10

13. The in-vehicle data system of claim 9 wherein the vehicle comprises an automobile.

15 14. The in-vehicle data system of claim 9 wherein the vehicle telecommunication device comprises a radio.

15. The in-vehicle data system of claim 14 wherein the vehicle telecommunication device comprises a radiotelephone.

20 16. The in-vehicle data system of claim 14 wherein the vehicle telecommunication device comprises a satellite telephone.

17. A data processing method for an in-vehicle information system, the information system including a host, a radio and a detachable external computer, the method comprising:

detecting a ready control signal from the external computer;

5 in response to the ready control signal, coupling the external computer to the radio for two-way radio communication with a remote radio;

10 in response to absence of the ready control signal, coupling the host to the radio for two-way radio communication with a remote radio; and

in response to a predetermined event, decoupling the external computer from the radio and coupling the host to the radio for two-way radio communication with a remote radio.

15 18. The method of claim 17 wherein coupling the external computer to the radio comprises:

providing a switch control signal to a switch circuit; and

20 in response to the switch control signal, completing an electrical path through the switch circuit between the external computer and the radio.

19. The method of claim 18 wherein coupling the host to the radio comprises:

providing the switch control signal to the switch circuit; and

in response to the switch control signal, completing an electrical
5 path through the switch circuit between the host and the
radio.

20. The method of claim 17 wherein the predetermined event
comprises an emergency condition of the vehicle detected by the
10 information system.

21. The method of claim 17 further comprising:

determining a priority among one or more events associated with the
vehicle;

15 detecting an event;

if the external computer is engaged in two-way radio communication
with a remote radio, comparing priority of the detected event
with a priority for the two-way communication; and

interrupting the two-way communication according to the priority
20 comparison.

22. The method of claim 17 further comprising:

communicating among the host, the radio and the external computer
according to a serial data communications standard.

5 23. The method of claim 22 wherein the serial data
communications standard comprises RS-232.

24. The method of claim 22 further comprising:

10 providing necessary control signals according to the serial data
communications standard to terminate an existing two-way
radio communication when decoupling the external computer
and to initiate a new two-way radio communication when
coupling the host.

15 25. A data processing method comprising:

at a first computer, originating a ready control signal;

at a host, receiving the ready control signal and in response
producing a control signal;

15 selectively coupling one of the host and the first computer to a
20 telecommunication device in response to the control signal
from the host.

26. The data processing method of claim 25 further comprising:
generating the control signal to couple the first computer to the
telecommunication device in response to receiving the ready
control signal; and

5 generating the control signal to couple the host to the
telecommunication device in response to absence of the
ready control signal.

27. A data processing method for an in-vehicle information
10 system, the information system including a host, a telecommunication
device, a switching circuit and a detachable external computer, the method
comprising:

connecting the detachable external computer through the switch
circuit to the host and the telecommunication device;

15 transmitting a predetermined code from the detachable external
computer to the host; and

at the host, detecting the predetermined code and actuating the
switch circuit to initiate communication between the
detachable external computer and the host.

20

28. The data processing method of claim 28 further comprising:
in response to connecting the detachable external computer,
automatically coupling the detachable external computer and
the telecommunication device for electrical communication.

5

29. The data processing method of claim 28 further comprising:
at the host, monitoring all data exchanged between the detachable
external computer and the telecommunication device; and
comparing data from the detachable external computer with the
predetermined code.

10

30. The data processing method of claim 27 wherein connecting
the detachable external computer comprises:
engaging a dash-mounted connector of the vehicle.

15